

# US FOREST SERVICE NORTHWEST MONTANA BACKCOUNTRY AVALANCHE ADVISORY



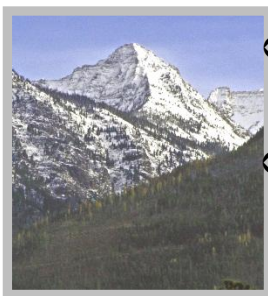
FOR THE GLACIER PARK AND FLATHEAD & KOOTENAI NATIONAL FOREST AREAS

*Avalanche advisory does not apply to developed ski areas*

**Issue Date:** 5:30 AM, Friday, March 16, 2012  
**Valid Until:** Midnight, Friday, March 16, 2012  
**Next Update:** Tuesday, March 20, 2012  
**Issued by:** Stan Bones

This advisory is a product of the US Forest Service, US Dept. of Agriculture. Along with other snow and avalanche information, it is originally posted at <http://www.fs.usda.gov/flathead>. An audio summary is available via telephone at 406-257-8402

## All Mountain Ranges



7,500 ft. elevation



5,500 ft.



### Avalanche Danger Summary

**3 - Considerable :** 5,500 to 7,500 ft. elevation, on steep, open slopes and gullies, especially in areas with significant amounts of new precipitation falling as snow or rain

**2 - Mod :** below 5,500

### Avalanche Danger Trend

**Trending gradually downward Sunday and Monday as drier, cooler conditions develop**

### AVALANCHE – INSTABILITY DESCRIPTION



All Mountain Ranges - 5,500 to 7,500 ft. elevation

Danger Level	3 - CONSIDERABLE
Confidence	Good
Travel Advice	<ul style="list-style-type: none"> <li>Dangerous avalanche conditions</li> <li>Careful snowpack evaluation, cautious route-finding, and conservative decision-making essential</li> </ul>
Likelihood of Avalanches	<ul style="list-style-type: none"> <li>Natural <u>slab</u> and <u>loose</u> snow avalanche <b>possible</b></li> <li>Human triggered avalanches <b>likely</b></li> <li>Small avalanches in many areas</li> <li>Larger avalanches in specific areas</li> <li>Very large avalanches in isolated areas</li> </ul>
Avalanche Size & Distribution	<ul style="list-style-type: none"> <li><b>Concern is steep slopes and gullies lacking vegetative and terrain anchors in areas that recently received significant new precipitation, either in the form of snow or rain</b> <ul style="list-style-type: none"> <li>Particularly slopes with a relatively thin snow cover and a basal layer of weakly bonded, eroding, faceted grains</li> <li>Also unstable surface slabs poorly bonded to buried surface hoar or layers of melt-freeze ice</li> <li>And finally wet loose surface snow weakened by rain or warming temp's</li> </ul> </li> </ul>

**AVALANCHE – INSTABILITY DESCRIPTION****All Mountain Ranges – below 5,500 ft. elevation**

<b>Danger Level</b>	<b>2 - MODERATE</b>
<b>Confidence</b>	Good
<b>Travel Advice</b>	<ul style="list-style-type: none"> <li>• Heightened avalanche conditions on steep, open slopes and gullies, particularly those that recently were drenched with rain</li> <li>• Evaluate snow and terrain carefully</li> </ul>
<b>Likelihood of Avalanches</b>	<ul style="list-style-type: none"> <li>• Natural avalanche <b>unlikely</b></li> <li>• Human triggered avalanches <b>possible</b></li> </ul>
<b>Avalanche Size &amp; Distribution</b>	<ul style="list-style-type: none"> <li>• Small avalanches in specific areas</li> <li>• Larger avalanches in isolated areas</li> </ul>

*Because of the general nature of this advisory message, each backcountry party will always need to make their own time and site specific avalanche hazard evaluations. This advisory best describes conditions at the time of its issuance. As time passes avalanche and snow conditions may change, sometimes quite rapidly. Elevation and geographic distinctions used are approximate and transition zones between hazards exist.*

**Recent Mountain Weather**

<b>Summary</b>	<ul style="list-style-type: none"> <li>• Since Sunday a series of fast moving Pacific storm systems have passed over the region</li> </ul>
<b>Precipitation</b>	<ul style="list-style-type: none"> <li>• Moist, heavy, snowfall or rain has impacted many mountain locations <ul style="list-style-type: none"> <li>◦ Most impacted are the Kootenai mtn. ranges, the Cabinets and Purcells</li> <li>◦ Lesser in the North Whitefish Range and the northern mtns of Glacier Park</li> <li>◦ Least precipitation in the Mission, Swan, and Flathead Ranges</li> </ul> </li> </ul>
<b>Temperature</b>	<ul style="list-style-type: none"> <li>• Daily average temperatures have generally been mild, in the high 20's F</li> <li>• Thursday's average daily temperature warmed into the mid 30's</li> </ul>
<b>Wind</b>	<ul style="list-style-type: none"> <li>• Moderate to strong winds generally from the W</li> <li>• Wind transport of snow has been minimal however because of the wet nature of the new snowfall and existing snow surfaces</li> </ul>

**Field Observation Locations**

Wednesday, 3-14-12	<ul style="list-style-type: none"> <li>• Red Mountain, Purcell Range, NE of Troy, on the Kootenai</li> <li>• Snowslip Area, John Stevens Canyon, N of Highway 2 in Glacier Park, W of Marias Pass</li> </ul>
Thursday, 3-15-12	<ul style="list-style-type: none"> <li>• Skyland Creek Area, S of Highway 2, W of Marias Pass on Flathead</li> </ul>

**Observer Report Locations**

	None Recieved
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**Avalanches Observed**

Numerous small to moderate sized wet loose slides released Thursday along the Middle Fork of the Flathead River, in John Stevens Canyon, and in the Skyland Cr. Area W of Marias Pass

Instability Concern / Avalanche Problem	Level of Concern	Most★★★    Less★★    Least ★		
<b>New Storm or Near Surface Snow</b>	★★★	<ul style="list-style-type: none"> <li>Significant precipitation loading began Sunday at many mountain locations</li> </ul> <p><b><u>Sunday into Thursday</u></b>  <i>Cabinet &amp; Purcell Ranges on the Kootenai</i>            Approx. 3 to 7-inches of new snow water equivalent  <i>Northern Whitefish &amp; Northern Mtns of Glacier Park</i>            Approx. 2 to 4-inches of new snow water equivalent  <i>Mission, Swan, &amp; Flathead Ranges on the Flathead</i>            Approx. 0.2 to 1-inch of new snow water equivalent            Much of Thursday's precip. fell as rain as temperatures warmed</p> <p><b><u>Thursday night</u></b>  <i>All mountain locations</i> appear to have received significant new precipitation falling in the form of snow or rain</p>		
<b>Wind Loading</b>	★	<ul style="list-style-type: none"> <li>Winds have frequently been strong, generally blowing from the S, SW, to W                Warm, moist conditions however, have generally kept wind transport of snow in check</li> </ul>		
<b>Recent or Persistent Buried Weak Layer</b>	★★★	<ul style="list-style-type: none"> <li>Concern with the buried surface hoar, buried melt-freeze ice crusts and buried graupel dominated layers                   <ul style="list-style-type: none"> <li>○ All these weak layers when present continue to fail in shear tests</li> </ul> </li> <li>Concern also remains with basal depth hoar found beneath shallow snow covers, especially where the ground is exposed rock</li> </ul>		
<b>Spring Wet Snow or Melt-Freeze</b>	★★	<ul style="list-style-type: none"> <li>Not applicable currently with reestablished cloud cover</li> <li>Can occur rapidly however with even just short clearing periods following a new snowfall</li> </ul>		
<b>Rain-on-Snow</b>	★★★	<ul style="list-style-type: none"> <li>Concern exists with free water movement imparting surface load and impacting buried weak layers</li> </ul>		
<b>Loose Snow</b>	★★	<ul style="list-style-type: none"> <li>Mild temperatures generally promoting snow consolidation</li> <li><b>Rapid warming following new snowfall or rain-on-snow however, is likely to produce surface snow instability</b></li> <li>These slides may serve as triggers of deeper slab instability</li> </ul>		
<b>Other Concerns</b>				

#### Weather Forecast

[Current NWS Backcountry Forecast](#)

<b>Summary</b>	<ul style="list-style-type: none"> <li>Moist Pacific flow is forecast to remain through the weekend</li> </ul>
<b>Precipitation</b>	<ul style="list-style-type: none"> <li>Each new storm system has the potential to produce up to 12-inches of new snowfall</li> </ul>
<b>Temperature</b>	<ul style="list-style-type: none"> <li>Temperatures expected to remain mild                Daytime in the 30's F                Nighttime in the 20's F</li> </ul>
<b>Wind</b>	<ul style="list-style-type: none"> <li>Friday, SW, teens to low 20's MPH</li> <li>Saturday, W, low teens to single digits</li> <li>Sunday, NW, light, capable of transporting snow as temperatures cool</li> </ul>

## Avalanche Outlook

<b>Trend</b>	<ul style="list-style-type: none"><li>• Sunday and Monday we expect a gradual downturn in avalanche danger as conditions dry and cool</li></ul>
<b>Concern</b>	<ul style="list-style-type: none"><li>• <b>Friday and Saturday however the moist flow is expected to maintain current level of avalanche danger</b></li><li>• <b>Current weather and snow conditions will eventually produce a more settled and strong snowpack</b></li></ul>
<b>Comment</b>	<ul style="list-style-type: none"><li>• <b><u>ALWAYS</u> carry and know how to use your avalanche safety equipment</b><ul style="list-style-type: none"><li>○ <b>Transceiver</b></li><li>○ <b>Probe</b></li><li>○ <b>Shovel</b></li></ul></li><li>• <b>Check out the site specific snow stability before jumping in or on any slope that has the potential to avalanche</b></li></ul>